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Our Reference: VTE-153-B

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Moler et al.  
Serial Number: 10/817,512  
Filing Date: April 02, 2004  
Examiner/Art Group Unit: Unknown/3745  
Title: PIEZO-ELECTRIC ACTUATED MULTI-VALVE  
MANIFOLD

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT  
PURSUANT TO 37 C.F.R. § 1.97

Mail Stop - Amendment  
Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

The references listed in the attached form PTO-1449 are cited pursuant to Rule 37 C.F.R. 1.56 to meet the duty to disclose to the Patent Office all information known to the inventor, attorney or any other person who is substantively involved in the preparation or prosecution of the application or who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

Copies of the International Search Report and any foreign patent office Search Report are enclosed for the Examiner's use, and these reports indicate the relevance of the cited references according to the respective search authorities.

A copy of each cited reference is not enclosed pursuant to United States Patent and Trademark Office OG Notices: 05 August 2003 which waives the requirement to submit a copy of each cited U.S. Patent and U.S. Patent Application Publication for all U.S. National Patent Applications filed after June 30, 2003.

Pursuant to 37 C.F.R. § 1.97(c) and (e)(1) this Information Disclosure Statement includes the following Certification that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office

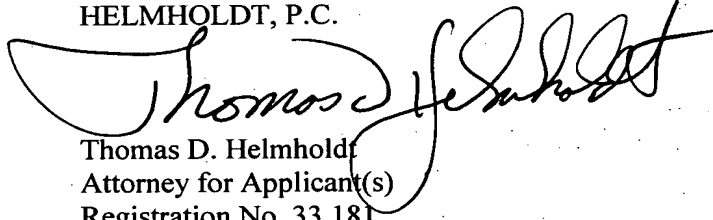
in a counterpart foreign application not more than three months prior to the filing date of this Statement.

If a written English-language translation of a non-English language document, or portion thereof, is within the possession, custody or control of, or is readily available to any individual designated in § 1.56(c), a copy of the translation accompanies this Statement.

These references constitute all the information of which the individuals pursuant to 37 C.F.R. § 1.56(c) are currently aware.

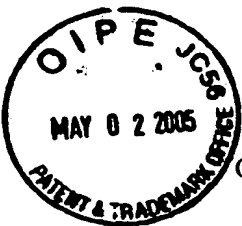
Respectfully submitted,

YOUNG, BASILE, HANLON, MacFARLANE, WOOD &  
HELMHOLDT, P.C.

A handwritten signature in black ink, appearing to read "Thomas D. Helmholdt", is written over the printed name and title.

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Dated: April 28, 2005  
TDH/TMS/jel



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**CERTIFICATE OF MAILING AND TRANSMITTAL LETTER**

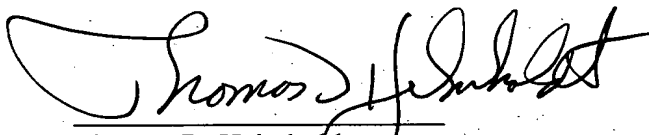
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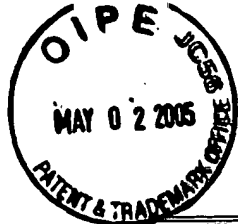
Transmitted with this document is a Supplemental Information Disclosure Statement, including copies of cited foreign patents, other references, International Search Report and a return receipt postcard in the above-identified application.

- X No additional fee is required.
- X Please charge any deficiency or credit any excess in the enclosed fees to Deposit Account Number 25-0115.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450, on **April 28, 2005**.

  
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Sheet 1 of 2

FORM PTO-1449 LIST OF REFERENCES CITED BY APPLICANT				ATTY. DOCKET NO. VTE-153-B		SERIAL NO. 10/817,512	
				APPLICANT Moler, et al			
				FILING DATE April 02, 2004		GROUP 3745	
U. S. PATENT DOCUMENT							
EXAMINER INITIALS		PATENT NO.	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE
	AA	6,523,451	02/25/2003	Liao et al			
	AB	6,234,060	05/22/2001	Jolly			
	AC	5,431,086	07/1995	Morita et al			
	AD	5,546,847	08/1996	Rector et al			
	AE	6,467,264	10/2002	Stephenson et al			
	AF	3,099,289	06/1960	Neilson et al			
	AG						
	AH						
	AI						
	AJ						
	AK						
FOREIGN PATENT OR PUBLISHED PATENT APPLICATION							
		DOCUMENT NO.	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION
	AL	GB2203195 A	10/1988	United Kingdom			
	AM	DE 10122297 C1	06/2002	Germany			
	AN						
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)							
	AO	Karim Khayati, Pascal Bigras, and Louis-A. Dessaint; NONLINEAR CONTROL OF PNEUMATIC SYSTEMS; Ecole de Technologie Superieure; 1100, rue Notre-Dame Ouest, Montreal (Quebec) H3C 1K3					
	AP	HIGH SPEED SERVO PNEUMATIC ACTUATOR SYSEMS; (modified on 13 January 2004); Design of High Speed Machinery (DHSM) LINK Programme; Engineering & Physical Sciences Research Council; Department of Trade & Industry; March 1995 to August 1997, Grant Reference: GR/K38663					
	AR	Journal of Zhejiang University SCIENCE; (ISSN 1009-3095, Monthly), 2001 vol. 2, no. 2, pages 128-131; CLC Number: TP271, 32; Document Code: A RESEARCH ON THE CONTINUOUS POSITIONING CONTROL TO SERVO-PNEUMATIC SYSTEM; Tao Guo-liang, Wang Xuan-yin, & Lu Yong-xiang					
	AS	MODELING AND SIMULATION OF A SERVOPNEUMATIC GRIPPER; Salvador Esque and Jose LM Lastra, date 10 Dec 99					
	AT	MODIFIED FEEDBACK LINEARIZATION CONTROLLER FOR PNEUMATIC SYSTEM WITH NON-NEGLIGIBLE CONNECTION PORT RESTRICTION; Pascal Bigras, Karim Khayati, Tony Wong; University of Quebec					
	AU	ND9000 INTELLIGENT VALVE CONTROLLER; METSO AUTOMATION; date: July 7/2003					
EXAMINER				DATE CONSIDERED			
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not considered. Include a copy of this form with next communication to applicant.							

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	AA						
FOREIGN PATENT OR PUBLISHED PATENT APPLICATION							
		DOCUMENT NO.	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION
	AB						
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)							
	AC	INTRODUCING PRECISIONAIRE – A BREAKTHROUGH PNEUMATIC MOTION SYSTEM					
	AD	AXIS CONTROLLER SPC 200; Festo AG&Co.; Products 2001					
	AE	KUHNKE “SPEEDY” Machine Building Process Module; Switched Pneumatic Electrical Endposition Damping-E635 GM/02 92.652					
	AF	SWITCHED PNEUMATIC ELECTRICAL ENDPOSITION DAMPING; Werner Brockman; University of Lubeck Institute of Computer Engrg. Lubeck, Germany					
	AG	BLOCK-ORIENTED NONLINEAR CONTROL OF PNEUMATIC ACTUATOR SYSTEMS; fulin Xiang; Doctoral Thesis, Mechatronics Lab, Department of Machine Design, Royal Institute of Technology, KTH; S-100 44, Stockholm, Sweden, 2001.					
	AH	HYDRAULIC & PNEUMATIC ACTUATORS; Sensors & Actuators for Mechatronics Hydraulic and Pneumatic Actuators; K. Craig.					
	AI	ADAPTIVE NEURON CONTROL BASED ON PREDICTIVE MODEL IN PNEUMATIC SERVO SYSTEM; Huang Wenmei, Yang Yong, Tang Yali; College of Mechanical and Automotive Engrg. Hunan University, 410082, Changsha, Hunan, P.R. China.					
	AJ	PROPNEU – AN INTELLIGENT SOFTWARE TOOL; Hong Zhou, Ph.D., Festo AG & Co., Ruitersstr, 82, D-73734, Esslingen, Germany					
	AK	PNEUMATIC SERVO SYSTEMS CONTROLLED BY SELF-TUNING FUZZY RULES; Akira Shimizu, Satoru Shibata, and Mitsuru Jindai, Dept. of Mech. Eng. Ehime University, 3, Bunkyo-cho, 790-8577, Matsuyama, Ehime, Japan.					
	AL	MODELICA – Proceedings of the 3 <sup>rd</sup> International Modelica Conference, Linkoping, November 3-4, 2003, Peter Fritzson (editor)					
	AM	HIGH STEADY-STATE ACCURACY PNEUMATIC SERVO POSITIONING SYSTEM WITH PVA/PV CONTROL AND FRICTION COMPENSATION; Shu Ning and Gary M. Bone; Dept. of Mechanical Engrg., McMaster University, Hamilton, Ontario, Canada, L8S 4L7. Proceedings of the 2002 IEEE, International Conference on Robotics & Automation, Washington, DC – May 2002					
	AN	A HYBRID PNEUMATIC/ELECTROSTATIC MILI-ACTUATOR; Kenneth H. Chiang, Ronald S. Fearing; ROBOTICS AND INTELLIGENT MACHINES LABORATORY; Dept. of Electrical Engrg. And Computer Sciences; 265M Cory Hall, University of California, Berkeley, CA 94720-1770					
	AO	MODELING IDENTIFICATION, AND CONTROL OF A PNEUMATICALLY ACTUATED, FORCE CONTROLLABLE ROBOT; J.E. Bobrow and B.W. McDonell; Irvine, California 92697					
	AP	MODELLING AND SIMULATION OF PNEUMATIC CYLINDERS FOR A PHYSIOTHERAPY ROBOT; R. Richardson, A.R. Plummer, M. Brown; School of Mechanical Engrg., University of Leeds, UK; Instron Ltd., UK					
	AR	STUDY OF PNEUMATIC MOTION BASE, CONTROL CHARACTERISTICS; Kenji Okiyama and Ken Ichiryu, Tokyo University of Technology, Katakuracho 1404-1, Hachioji-city, Tokyo, Japan (date unspecified)					
EXAMINER				DATE CONSIDERED			
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